



The cultural impact on the performance of European M&A:

The case of Chinese's acquisitions

José Diogo Marques da Silva Godinho



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Prof. Dr. Miguel Sousa



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Biographical Note

José Diogo Godinho was born on May 8th of 1995, in Porto, Portugal. He lives in Santo Tirso where he finished high school before joined Faculdade de Economia do Porto (FEP) at University of Porto, in 2013. He completed his bachelor in Economics in 2016, starting then the Master in Management at FEP, which he is currently attending.

In September of 2017, he started an internship in the Treasury department of SEG Automotive Portugal (former Bosch Starter Motors and Generators Portugal) where he was given a full-time job in January 2018. He now works in the Controlling area focused on Liquidity Planning.

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Abstract

The last decade was marked by an astonishing increase of the importance of Internationalization in each companies' lives which directly lead to a complementary increase of the number of cross-border Merger and Acquisitions (M&A) all over the world. Moreover, it was emerging countries, just as China, with the intent of strengthening their influential place in the world, that are leading this trend of international acquisitions.

Several researchers have deepened their investigation into this era of M&A to better understand their motives, their consequences and, above all, to better understand the impact that being acquired may have on a company cycle. In addition, a stream of literature has focused their studies into the cultural differences as a key factor on the previously mentioned impact. Nevertheless, from the studies that surfaced, there is no consensus on this theme among the various authors.

In light of the existent disagreement of conclusions and to fill the gap in the existent literature, the present dissertation conducted its analysis concentrating on European companies that were bought by Chinese groups and the impact that the clash of cultures does have on the acquired company's performance.

Such assessment was based on the examination of the Assets, Sales and Return on Assets (ROA) from 84 European M&A deals taken by China during 2007 to 2013. Furthermore, it was included a group of another 84 companies similar to the first ones with the unique difference of not being acquired by a Chinese player. This control group was included in order to understand if by being acquired by a Chinese company instead of remaining non-participated resulted in different performance paths.

In the end, three main conclusions were drawn: first, companies acquired by Chinese players assist to a higher growth of their assets and their sales in the following years of the acquisition in comparison to the control group; second, the aggregated cultural difference measured against China does have a significant impact on the assets growth, sales growth and ROA change; third, assets growth is positively affected by the difference in Masculinity indicator, sales growth is negatively affected by the difference in Long Term Orientation indicator and ROA change is positively affected by Individualism and Indulgence Versus Restraint indicators and negative affected by Uncertainty Avoidance.

JEL-codes: F23, F60, G34, M14

Key words: Internationalization, China, Merger&Acquisitons, Culture Differences

Resumo

A última década foi marcada por um singular crescimento da importância da Internacionalização na vida das empresas o que levou a um crescimento complementar do número de Aquisições Transfronteiriças em todo o mundo. Para além disso, são países em vias de desenvolvimento, como a China, que, com o intuito de fortalecerem a sua influência global, lideram esta onda de aquisições internacionais.

Vários investigadores aprofundaram o estudo desta era de Aquisições e Fusões com o objetivo de entenderem os seus motivos, as suas consequências, mas, essencialmente, para perceberem o impacto que uma aquisição pode ter na vida de uma empresa. Paralelamente, a literatura incidiu os seus estudos nas diferenças culturais como um fator chave no impacto anteriormente referido. Todavia, da literatura existente, reduzidos são os estudos que permitem concluir algo sem contradizer conclusões anteriormente elaboradas por outros investigadores, provando, assim, o caráter controverso deste tema.

Com o objetivo de ultrapassar as contradições e as lacunas da literatura existente, a presente dissertação conduz a sua análise concentrando o estudo em empresas europeias que foram adquiridas por grupos chineses e o impacto que tem o choque de culturas na performance da empresa adquirida.

Tal pesquisa é baseada na observação do crescimento dos Ativos, das Vendas e da variação da Rentabilidade dos Ativos de 84 aquisições europeias pela China durante 2007 a 2013. Foi também incluído neste estudo um outro grupo de 84 empresas similares em tudo às primeiras, com a única exceção de não terem sido adquiridas por grupos chineses. Este grupo de controlo foi acrescentado com o objetivo de se perceber se uma empresa europeia pelo facto de ser adquirida por um grupo chinês, em vez de permanecer não participada por capitais chineses, tem uma evolução diferente na sua performance.

No final, partindo dos resultados obtidos, podem ser retiradas três conclusões preponderantes: 1) as empresas adquiridas por chineses veem o crescimento dos seus ativos e das suas vendas crescer mais nos anos seguintes ao da aquisição, do que veriam se a sua empresa tivesse permanecido não adquirida; 2) a diferença cultural agregada tem um impacto significativo no crescimento dos ativos, das vendas e da variação da rentabilidade dos ativos; 3) o crescimento dos ativos é positivamente afetado pela variável cultural Masculinidade; o crescimento das vendas é negativamente afetado pela variável cultural Orientação a Longo Prazo e a variação da rentabilidade do ativo é positivamente afetada pelo Individualismo e Indulgência e negativamente afetada pela Aversão à Incerteza.

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1. Introduction

We live in an era where Internationalization is an essential topic for any business. Companies today cannot decide not to follow the thread of globalization by focusing in their own domestic market. Each day that passes, the wall, which used to divide “domestic” and “foreign” is getting thinner and thinner, and once it breaks, the market will become one only. More than a question of thriving, internationalization is a question of company survival.

Moreover, the eagerness of expanding and exploring the foreign markets by big company groups led to what is now one of the biggest phenomena of today’s world - the Cross-Border Acquisitions. This can be defined as “the combination of two or more companies settled in different countries into one new company or corporation” (DePamphilis, 2001).

In spite of the increasing importance of this topic, gaps of knowledge still remain, for instance, about what happens after a company is acquired by a group from another continent. This is the reason why more studies into this matter have to be done, not only to understand the implications of such an important process but also - and mainly - to fully understand what happens after.

Taking this into account, we propose to study - the impact on cultural differences on Cross-Border Acquisitions. Furthermore, in order to guarantee the coherency and accuracy of this paper, we decided to narrow this topic by investigating the impact on European companies acquired between 2007 to 2014 by Chinese companies. The reason for choosing China is due to the amount of European-based companies (from all sectors such as food distribution, energy, IT,...) that have been acquired by Chinese companies since the very beginning of the 21st century. In addition, according to what Xian (2016) wrote in an article for the “China Daily”, 72% of Chinese companies said they planned to make a foreign acquisition over the next three years.

Therefore, we intend to analyze and compare the operating performance of the companies from before being acquired to the following 3-years period after the Cross-Border acquisition. To do so, we will focus, among others, on the ROAs and its evolution before and after the acquisition, as also as, the evolution of sales and of assets. Then, with all this data, collected through Amadeus database, we intend to explain and relate the conclusions

achieved with the type of country from which the company was bought to evaluate if there is some cultural explanation for the thrive or collapse of the company. Besides, we intend to relate specifically towards a cultural difference. Something that can be measured, something that can be seen and studied when analyzing the possibilities of acquisitions in a group of countries. Our goal is to create a model to facilitate and support the decisions of international groups when they decide to invest abroad.

Consequently, in the end and focusing on the conclusions extracted from this paper, our objective is to be able to properly forecast the changes in a company's life when it is bought by an international group and to predict which type of company a group has to buy in order to maximize its possibility of creating value.

The structure of this study proceeds as follow. After this Introduction, a Literature Review, with the main issues of this paper, is revised in the chapter 2. In chapter 3 the methodology and the sample are described with the presentation of the conclusions from the univariate analysis in chapter 4. Chapter 5 presents the multivariable analysis used in this dissertation and its conclusions are discussed in chapter 6. Finally, chapter 7 puts forward the dissertation's main conclusions, limitations and paths for future research.

2. Literature Review

Inward and outward Foreign Direct Investment (FDI) has been playing a major role in the development of our global economy. Even though the highest peak was in pre-crisis in 2007 with \$2.1 trillion dollars (UNCTAD, 2016), global forecasts state that FDI will increase from \$1.8 trillion in 2017 to \$1.9 trillion in 2018 overcoming, in this way, the political instability and conflicts between major powerful countries and the uncertain policies from governments towards FDI (UNCTAD, 2017). This can be explained by the fact that in 2016, dozens of countries adopted 124 national investment measures – the highest since 2006 – in which most of those, the objective was to encourage and prioritize the foreign investment.

Nevertheless, about 1/5 of the measures countries took, introduced new investment restrictions or regulations which were mainly directed to avoid the control of key firms by foreign investors takeovers (UNCTAD, 2017). This percentage of 20% of restrictive regulations is still one of the highest since the beginning of internationalization in the year 2000.

Keeping these uncertainty policies pro and counter the international investment flow in mind, which were a result of the political changes happening in the world like Brexit, the elections in Europe and Trump's Administration decision to abandon the Trans-Pacific Partnership and renegotiate key trade agreements such as the North American Free Trade Agreement (NAFTA), have all increased the world uncertainty, making us understand how volatile the investment environment is in the world.

Moreover, according to UNCTAD Global Investment Report 2017, in the case of FDI inflows, 59% hold steady going to developed countries headed by United States. However, thanks to the good economic situation most Asian countries are living, China and Hong Kong are growing the interest and confidence of international investors increasing, therefore, their attraction of global investments by 15% more when compared to 2016.

On the other hand, when analyzing FDI outflow (UNCTAD, 2017) we realize that as a consequence of the depreciation of national currencies and the declining commodity prices, there was a decrease in 2015 in most of developing regions. Yet, China did not follow the decrease of the other Asian countries and kept its outward FDI high rising from \$123 billion to \$128 billion achieving, therefore, the position of the 3rd biggest source of FDI in the

world right after US and Japan (OECD, 2016). In the next year of 2016, China maintained its international position as source of FDI with an increase of 43% which result in an FDI outflow of \$183 billion (UNCTADSTAT, 2017).

In conclusion, FDI remains the largest and most constant external source of finance for developing economies (UNCTAD, 2017).

2.1. Important Definitions about Merger and Acquisitions

According to Ghauri and Buckley (2003), we can define Merge as a combination of assets of two separate and independent firms into a single new one, different from the two in the beginning.

On the other hand, they define Acquisition as the seizing of one company's assets (the acquired) by another company (the acquirer) which will absorb the former's assets and will continue to exist, while the acquired vanishes.

However, a Merger and Acquisition (M&A) process is not easy at all. It requires careful planning, competent professionals assisting the target company, and an understanding of the deal dynamics involved in the negotiations (Harroch, 2015). Moreover, it involves deep concerns in a "Pre-M&A" period (number 1 to 4 in Figure 1) with the valuation and the motivation for such process and, in the end, in a "Post-M&A" stage (number 5 in Figure 1), the question of integration and performance evaluation which, in most of the times, can be resolved only with a significant temporal delay as a result of the inefficiency of the labour and capital market (Ghauri and Buckley, 2003).

Figure 1: Key Activities along the M&A life cycle



Source: A.T. Kearney Merger's analysis

2.2. Types of M&A

Nahass and Suidam, for the international audit company PricewaterhouseCoopers (PwC), defined, in their 2017 M&A Integration Survey Report, four different types of acquisitions deals behind M&A: the Transformational type, when the acquisition deals involve acquiring new markets, channels, products, or operations in a way that is transformative to the fully integrated organization. Then the Absorption type (sometimes called Consolidation type), when the deals involve acquiring and integrating similar companies as their own, such as industry competitors; the Tuck-in type, when the deals involve acquiring and integrating relatively small companies, generally to pick up key products or technologies; and Stand-alone type, when the deals involve acquiring but not integrating *per se*, this type of acquisition keeps the newly acquired entity operationally separate from the rest of the organization.

2.3. Factors to consider when starting a M&A process

A.T. Kerney, a Global Management Consulting Firm, define five overreaching areas needed in order to have a more successful process of M&A:

- Internal Capabilities – first, while starting to think about adopting a M&A strategy, a company has to make an internal assessment of its capability of dealing with the business and operational risks connected to a M&A. Also, it is required for that future acquirer company to be ready to integrate the two companies and to capture the synergies.
- Strategic goals and alignment – then, the acquirer company has to evaluate its financial and strategic capacity to understand which course is more advisable for the company to take – whether if it is, in fact, an acquisition, or, if it is better and safer, a normal organic growth.
- Selection criteria – AT Kerney states that if a company only evaluates its financial criteria that will not be sufficient to guarantee a successful M&A. Evaluations of Cost Reduction, Synergy opportunities, post-acquisition market share, business unit turnaround and cultural fit are major elements to analyse.
- Target selection – if the company establishes explicitly and transparently the criteria consistent with the company's strategic objectives, the emergence of the right target firm comes easily, and it will facilitate the M&A process.

- Synergies and value creation - there has to be an accurate estimation of strategic value that can be extracted in a post-M&A period. Also, in order to convince the shareholders to take that action or in order to attract more investment, an evaluation of the creation of synergies after the acquisition is an essential factor.

2.4. Mergers and Acquisitions in the Developing World

In the past years, M&A have been the most important factor of the increasing tendency of Foreign Direct Investment (UNCTAD, 2016).

A.T. Kearney's study came to contradict the previous established thought that M&A were initiated by companies in the developed world towards other developed economies or developing ones. It came to the conclusion that from 2002 onwards, the number of deals between developing and developed countries grew at an annual rate of 19% and those deals actually were made four times faster. If we analyse 2007, the year when Mergers and Acquisitions reached a peak, from the 2168 majority acquisitions, 20% of it were driven by companies from countries like China, India, Malaysia, Russia and the United Arab Emirates. This comes to verify the findings done by A.T. Kearney: M&A are creating pressure on the developed world because of the incidence from developing countries by emancipating its companies into a global level overthrowing the pre-established developed countries, which were there before.

2.5. A third wave of M&A

Since we had already had two major waves of M&A in the world – the first between 1970s and mid-80s and the second between late 80s and 90s – we can now speak about a 3rd wave, which have begun in the late 90s up until today. This wave is characterized by the strength and the increase of prevalence of Emerging Economies' Transnational Companies in the world of investments and acquisitions (Rasiah and Gammeltoft, 2009).

However, one result of this advance of developing countries in the world of FDI was the government restrictions adopted by developed countries in order to protect their own interests from the emerging economies presence in their territory and in their major energetic and financial firms. International investment and M&A started, therefore, to be analyzed, also as a political move from countries like China, Russia, India to increase their power over

the developed countries who used to be the unequivocal leaders of FDI, like the US, Canada, Germany or Japan (Sauvant, 2009).

China was, in fact, the country where this emergence within the international world was most significant with an increase from \$26 billion in 2007 to \$52 billion in 2008 (Sauvant, 2009) and with a critical significance in the economic world such as being one of the most important capital providers to developing countries in Africa in 2007 (UNCTAD, 2007). Moreover, in 2016 had already reached an amount of \$108 billion expended in FDI (UNCTAD, 2017).

2.6. China's emergence in Internationalization

According to Chung and Alcácer (2002), foreign direct investment is the most effective way of accessing strategic assets. Strategic assets can be defined as “the set of difficult to trade and imitate, scarce, appropriable and specialized resources and capabilities that bestow the firm's competitive advantage” (Amit and Schoemaker, 1993, p. 36, emphasis original). Therefore, China with its deep investment in this international strategy became, since 1990's, the emerging economy with the largest FDI outflow with the primary motivation of acquiring those unique assets (UNCTAD, 2017) such as reputation, tacit knowledge, buyer-supplier relationships, brand name, legitimacy, prestige, human capital, technologies. All of those are factors that China, due to its institutional pressure and cultural cognitive influences does not have on its own, neither the possibility to develop in the needed time. Therefore, China has one single option: to acquire companies in countries with the assets in need to rapidly enter new markets and achieve a better level of competition (Makino et al., 2002). By doing so, Chinese firms are overcoming China's lack of legal protection of property rights, its poor enforcement of laws, its inefficient market intermediaries which allows them to reach a level where they can actually compete with world leading firms.

2.6.1. Possible Explanations for China's Internationalization

2.6.1.1. Inward Foreign Direct Investment

One of the reasons that can explain this outward investment position of China is, in fact, the amount of FDI that China does absorb. Before China began the considerable amount of outflow FDI by the form of M&A, China collected all the information it could from the inflow FDI (Luo and Tung, 2007, Deng, 2009). With this, it allowed Chinese firms to contact

with international market players, to gain international experience and knowledge (even though occidental firms in China were reluctant to share the intrinsic knowledge of its process because of being afraid of losing their competitive position (Guan et al., 2006)). It also gave Chinese firms the possibility to create a network of international financial and operational firms. In fact, this learning from foreign investor companies was very important in the process of transforming China into a net investor rather than a recipient of investment (Tiezzi, 2014).

Besides, this amount of inflow FDI acted as an accelerator and motivator for Chinese firms to go abroad because not only they were not competitive by world standards, but also they were starting to lose its own national market due to the penetration of other foreign companies (Witt and Lewin, 2007).

2.6.1.2. Chinese Government role

The poor situation of Chinese firms within its domestic market meant that they were losing for foreign companies. This made the government, through the action of National Development and Restructure Committee, as well as the National Export-Import Bank of China, to change its initial doctrine of “non-interference” (Clover, 2017), to stimulate companies to invest abroad in order to alleviate and compensate or even escape from a less efficient, less transparent and less encouraging Chinese environment (Luo and Tung, 2007).

Therefore, Chinese government played a major role in its companies internationalization process (Zeng and Williamson, 2003) by facilitating the access to credit with very low interest rates and with value-added taxes. All of these came due to China’s strategy of “Go Global”, announced in 2001, and together with joining the World Trade Organization (WTO) in that same year, are described as the cornerstones of China’s internationalization direction (Hitt et al., 2004). The effects of “Go Global” strategy continue to increase, year by year since its announcing, up to USD 3.5 billion in financial aid flows in 2013, 55% more than in 2009 (Gurría, 2014).

2.6.1.3. Resources Gap

In spite of the competitive advantage of Chinese firms by having access to its home country resources and production capabilities and workforce, it has been proved not enough to face the competitive pressure of a western world filled with high-tech products with better quality.

Therefore, Chinese companies were left only with the option of acquiring such companies in foreign countries in order to fill the technological and energy need that their country had and continues to have (Larson, 2013).

Consequently, China was focused in acquiring natural resources, high technology and oil reserves to face its national demand and to mitigate future international commodities price hikes (Pradeeph, 2011).

According to the Institute for Energy Economics and Financial Analysis' 2017 report, there is a big Chinese emphasis in clean-power investment: China expended \$32 billion marking a 60% year-on-year rise by investing in overseas renewable resources, becoming the largest world investor in clean energy.

2.6.1.4. Foreign Exchange Reserves

According to the Trade Economics database, China, in 2017¹, was the country with the largest foreign exchange reserves in the world growing a considerable stockpile of foreign reserves which makes the overseas investment easier to build up (Deng, 2009). Moreover, with Beijing's new policies, Chinese firms can exchange money without register within the government (Tiezzi, 2014) which also facilitates the overseas investment.

2.6.1.5. Protectionism

Protectionism can be a driving factor to Chinese M&A wave. If countries do increase its protectionism measures to prevent the national consumption of Chinese goods, it becomes cheaper and easier to Chinese firms to move to the desire market's country by acquiring a local-based firm, bypassing the taxes they would eventually face when exporting to that specific country.

Therefore, according to Chakrabarti et al. (2009), the motivation for a country like China to merge or acquire a foreign company increases in correspondence with the level of free trade barriers that country has - underlining the advantages of shifting from a simple exporter to a national company acquirer (Tiezzi, 2014).

¹ <https://tradingeconomics.com/china/indicators>. Accessed on 15th December 2017.

2.7. Cultural differences effects in M&A

For everything that is being stated above and keeping in mind the news we are constantly receiving everyday about internationalization indicators going higher and higher, it is safe to say that we are, indeed, in a new era of globalization (Hendrix, 2012). Therefore, having the levels of M&A continuing to be more important in terms of FDI, one of its main results is the increasing cultural indicator in the performance of this international merger wave (Black, 2000).

However, Kluckhohn and Strodtbeck (1961) were the firsts to detect a Cultural influence on the performance, value creation and decision making. They specially addressed and endowed the force exercised on the behavior, the results and on the way of acting of a population by their shared values - their culture's impact on their lives.

By his turn, Hall (1976) complemented his study on the culture and started to analyze the differences between countries in terms of context and language. In his view, United States is a country with a type of communication that can be characterized as low-context culture since it is mainly impersonal and with less social hierarchy attention. On the contrary, Asian and Arab nations are an example of high-context cultures with more complex perception and consciousness of communication where society is more hierarchical and sensitive towards the population actions.

Hence, it is possible for us to state that the importance of Culture in society actions is not a new topic recently developed neither is its influence on one country relation to another. Moreover, since those first studies, and because the performance of M&A is being deeply influenced by the integration process of two companies (Panibratov, 2017), numerous authors and researchers tried to measure the impact of Culture by further investigating the role of it in the world relations to conclude that there is no simple nor single approach to this topic. In fact, the vector and strength of influence remains open.

2.7.1. Cultural differences - disparity from previous studies

Up to today, the numerous studies about the actual effect of Cultural differences among companies from different countries which were integrated, are still needed to ascertain

whether the impact is positive, and the company thrives, or the clash of cultures is negative and makes the merger unsuccessful.

According to Bjorkman et al. (2007) cultural differences can enhance the combination of both companies. This cultural clash can be seen as a possibility for companies to share an unique access to maximize valuable capabilities necessary to gain competitive advantage (Chakrabarti et al., 2009). They also state that countries with more cultural distant characteristics do perform better in the long run for arming the acquirer firms with better organizational synergies that will increase its competitive advantage in the international marketplace. Moreover, by being aware of the possible cultural shocks, companies might prepare themselves in a better way to face these obstacles, which might result in a more selective M&A process, reducing, in this way, the possibility to fail the international move. Furthermore, Liu (2017) analyzed 127 Chinese acquisitions of foreign companies and the impact of culture in its performance in a post-merger stage, stated that to face culturally Uncertainty Avoidance disparity, if the company strengthens the cultural integration of overseas M&A, and really focus on it, it would benefit from cultural difference evidencing the positive effect of culture.

On the other hand, the very same study states that after observing those 127 Chinese acquisitions from 2005 to 2012, the unsuccessful rate was proved to be connected precisely to the cultural distance between the countries in the merger deal and to the lack of interest from the acquirer company to integrate the targeted one. Also, Otterspeer (2016) concluded that cultural differences could increase the integration cost by the form of not sharing information, the existence of conflicts and not communicating with employees of the other national culture, which would result, therefore, in a decreasing of the performance of M&A. Ahern et al. (2015) in his turn, states that cultural differences actually diminish the intention of Merger and Acquirer a foreign company and, in the same way, that M&A tend to increase when they are between countries with a similar history, with similar language, with a similar culture. Moreover, Bauer et al (2014) stated that cultural fit between companies is mandatory in order to a M&A to succeed in its process and the level of integration is the core factor in a foreign acquisition and without it the effort for efficiently control and create synergies deeply becomes more complicated.

Moreover, from a survey conducted by Basford et al, in 2010, they concluded that companies with incompatible cultures with no regards to their mutual integration can lead to the risk of losses, a messy and prolonged integration period and to a lack of success in capturing merger values and synergies.

Nevertheless, there is no consensus about the impact of cultural differences in business during an international M&A but one thing is clear among all the authors: the culture has indeed a very deep impact in the results of an international acquisition. According to Fealy's et al survey, answered, in 2011, by 123 organizations from around the globe from different industries, 33% answered that the top reason for the international deal failure is "Cultural integration issues", the second most cited in the survey. In addition, culture integration was indirectly connected to the other factors quoted by the respondents: 41% said that "Integration/implementation took longer than expected" was the main reason of a deal failure – which is a consequence of the lack of capacity to solve cultural problems-, and 30% answered that the main reason is the "insufficient attention/priority to workforce/people issues" – another consequence of different culture's problems in a company.

Furthermore, the very same survey also found out, by the analysis of the answers given, that most of the respondents considered loss of productivity, loss of key talent, failure to achieve intercompany synergies, decreased employee engagement and a delayed integration as the most serious consequences of unsuccessful cultural integration, evidencing the dependence of culture in the success of an international M&A.

In conclusion, even if it is not absolutely known the impact of culture in business, culture is indeed a key factor to consider from a people's perspective and also an overall business perspective, when performing an international deal merging two different organizations into an integrated one.

2.7.2. Hofstede Dimensions

Our study will try to prove and to understand those previous results by calculating the impact of the culture divergence in a cross-border acquisition specifically between Chinese groups and European target firms.

Furthermore, to measure the impact of culture in the performance variants, we could use one of three cultural databases: “GLOBE” – Global Leadership and Organizational Behavior Effectiveness created by House et al in 2004, which identifies nine cultural dimensions; the study of Nardon and Steers, from 2009, which elaborates five cultural dimensions; or the Cultural Dimensions Index created by Geert Hofstede in 1980.

Due to the fact it was one of the first cultural differences’ studies of our time, and the one still more accurate which, inclusive, continues to inspire the others, we will turn to Hofstede database, with the dimensions they there underlie to make us understand how powerful and strong the differences between the countries are and if, in any way, it is that what is contributing for the results the companies achieve. In this way, according to Geert Hofstede's book *Culture's Consequences* (1980), with updates in the further editions in 2001 and 2011, he defines the 6 necessary dimensions to measure, in a more accurate way, the differences between cultures:

- Individualism: “related to the integration of individuals into primary groups” – which analyses the cultures by the ties they have between individuals or, on the contrary, to the general group of society;
- Masculinity: “related to the division of emotional roles between women and men” – which relates specific characteristics to a masculine society (competition driven, achievement, success) or feminine society (caring, protecting, loyalty);
- Power distance: “related to the different solutions to the basic problems of human inequality” - It measures the acceptance of inequality distribution of power by the less powerful members of a society. In some cultures, “inequality is endorsed by the followers as much as by the leaders”;
- Uncertainty avoidance: “related to the level of stress in a society in the face of an unknown future” – it observes the tendency a culture has to feel satisfied or unsatisfied with the ambiguity and unstructured situations;
- Long term orientation: “related to the choice of focus for people's efforts: the future or the present and past” – this dimension stands for the commitment in a society to achieve future rewards by adapting to changing circumstances or, the same commitment but towards the focus on traditional virtues such as national pride, fulfilling social obligations, respect of heritage.

- Indulgence versus restraint: “related to the gratification versus control of basic human desires related to enjoying life” – which stands for measuring in which amount a society programs its members to directly follow strict social norms or, on the other hand, allows them to accomplish their human desires.

Thus, we will then be able to conclude whether or not cultural mismatch and lack of cultural integration are a major factor when investing abroad and, therefore, conclude which dimensions have to be taken into a special account when Chinese Groups decide to expand their business by acquiring foreign enterprises.

3. Methodology and Sample

The methodology of this dissertation will be divided into two different parts.

The first one will be an univariate equation which will serve the objective of comparing the evolution of financial indicators between the companies selected from different European Union countries that were bought by an international Chinese group and its matching companies which did not have any Chinese third-party participation on their capital. All these variable values will be drawn from Zephyr and Amadeus databases.

Then, the second part will focus on justifying, by the usage of multivariable model, how deep is the importance and the impact of cultural factors, among all factors, as the responsible variables of the acquired company development taken as result of the previous part.

3.1. Univariate Analysis

In this section, we will analyze three variables: Assets growth, Sales growth and ROA growth for both acquired companies and their matching ones. The analysis will focus on the values for the medians as the means are subjected to the effects of outliers.

For each variable we will study its raw data and individual evolution, from the year before being acquired to three years after being so.

Then, we will calculate the adjusted growth for each indicator, which will be drawn by subtracting the growth of the matching company to the acquired one. By doing so, we will remove the impacts from the economy changes as it is assumed that would affect the results of both groups simultaneously.

The growing rate of total Assets from the period before being acquired to the 3 years after, between the acquired companies to their matching ones will allow us to know whether or not, the company structurally grew after being acquired, thanks to the injection of Chinese capital or, in the other hand, it did not grow in comparison to the matching companies that were not bought.

In the same line of thought, we will compare the adjusted change rate of Return on Assets (ROA). ROA will be calculated by the value of each company's EBIT – Earning Before Interests and Taxes – divided by each company's total Assets for that given year. By doing so and keeping in mind that ROA measures how effectively a company is using its assets to

generate earnings², we will be in the best position to check the performance situation of the given company and its difference to its matching one.

Having all of these in mind, we will corroborate our first hypothesis which is:

H1: “Whether or not, ceteris paribus, a company bought by a Chinese group, grew more than it would if it remained unanticipated by a third cross border party.”

The equation which will be used can be expressed in the following manner:

$$\Delta X^{AJ} = \Delta X - \Delta X^m \quad (1)$$

Where:

X : is one of the following variables analyzed: ROA change, Asset’s growth, Sales growth, for the acquired company;

X^m : is the same analyzed variable but for the «matching» company;

X^{AJ} : is the adjusted version with the difference between those values’ variation which will tell us, if positive, that the company grew more because of being cross-border acquired or, if negative, that the growth was justified by a general boost of all economy itself and not because of the international acquisition.

The variances (Δ) will be calculated by analysing the values year by year, beginning one year immediately before the international deal (to see what the tendency was prior acquisition) up to three years immediately after the acquisition (to see if that tendency had any change). Moreover, the same will be applied for the matching companies, thus:

$$\Delta X_{t*} = X_{t*} - X_{t-1} \quad (2)$$

$$\Delta X_{t*}^m = X_{t*}^m - X_{t-1}^m \quad (3)$$

² Anon. n.d. “Return On Total Assets - ROTA.” Retrieved (https://www.investopedia.com/terms/r/return_on_total_assets.asp).

Where:

t-1: represents the year before the acquisition

t*: represents each year after the acquisition up to three years (t+1 ; t+2; t+3)

In addition, whenever variable X assumes the independent variable of Assets or Sales, then in the formulas (2) and (3) prior defined, ΔX_{t^*} will represent the percentage of growth of those variables for the year t* when in comparison to the year t-1, i.e.,

$$\Delta X_{t^*} = \frac{X_{t^*}}{X_{t-1}} - 1 \quad (4)$$

$$\Delta X_{t^*}^m = \frac{X_{t^*}^m}{X_{t-1}^m} - 1 \quad (5)$$

3.2. Sample definition and data collection

For this particular study, it is to the best of our belief, that the most effective course of analysis, as other authors concluded in their studies (Qian, 2017; Bauer et al, 2014), would be to retrieve the data from Zephyr and Amadeus Database, which is one of the biggest databases with a vast information about M&A from all over the world, including: financial status per year, percentage of acquisition, value of acquisition, all the information about the buyer, the target, the vendor, among numerous other information.

Therefore, we will select, as a sample, companies from all the 28 states of the European Union which were bought, between 2007 and 2014, by Chinese companies either as a minority participation or a full control one. This time range was selected in order to allow us the possibility to properly measure the financial status in the year before the cross-border deal – which will be called, from this point on, «year t-1» - and the 3 years immediately after it. Therefore, with this time range and by comparing the evolution of the financial performance criteria between the last year in which the company did not have any significant participation of a Chinese player and the three years after it started to have, we expected to be in the capacity to properly understand how influential and important for the company was the event of being bought by a Chinese acquirer.

Therefore, the selection criteria of those companies will follow the principal obligation of being European Union countries' companies and also from different sectors. Thus, between our selection, there will be represented companies from today's most important sectors such as energy producers, technologies, car industries, pharmaceutical companies, tourism, and so on, to better analyse and deduct whether or not a specific company's sector has a distinctive consequence from the Chinese acquisition when comparing to the others and if the acquisition has a more relevant result when analysed in different sectors.

Thus, according to Zephyr database, the number of companies that fits all of the required criteria (time range acquisition, Chinese acquirer, European target) was 253. From those, and by searching in Amadeus database their BvD ID number - Bureau van Dijk ID number -, we took out from the sample the ones that:

- i) were not active for, at least, a three years period of post-acquisition;
- ii) were bought merely because of its assets and were dissolved right after one year of the acquisition;
- iii) which financial data was not freely available in any database whatsoever – Zephyr, Amadeus, Bloomberg.

The final sample was then composed by 82 different European companies, which fulfilled all of those conditions. As shown in Table 1, the sample is composed by 16 different countries from European Union from which the majority number of deals are targeted in UK, Italy, France and Germany (22%, 16%, 13% and 11% of our sample, respectively). This can be explained by the fact that these countries are, according to World Bank data, economically speaking, the biggest countries in Europe and, therefore, from where Chinese companies can have more possibilities to find and to buy companies needed to fulfil their necessities – resources, technology, know-how, clients and suppliers' portfolios, among others.

Table 1: List of analyzed acquisitions by country

Countries	Number of acquisitions	%
UK	18	22%
Italy	13	16%
France	11	13%
Germany	9	11%
Netherlands	5	6%
Denmark	4	5%
Sweden	4	5%
Austria	3	4%
Finland	3	4%
Portugal	3	4%
Spain	3	4%
Belgium	2	2%
Cyprus	1	1%
Estonia	1	1%
Lithuania	1	1%
Poland	1	1%
Total	82	100%

Source: Own elaboration

In addition, as Table 2 shows, most of the deals that compose our sample are from the most recent years with information available for the 3 years of post-acquisition period that we defined our sample to follow. Therefore, 54% of the deals used in this study were completed in 2014 and 2013. Besides, we can see a crescendo effect of number of acquisitions in Europe through the years. That crescendo only has a small discontinuity because of 2008's peak probably connected to the economic crisis specially linked to Europe and US that allowed eastern economies to start to join western markets more freely.

Nevertheless, we can also associate the fact our sample being formed mostly by most recent deals with the evidence that it is easier to access the financial information of the latest deals in Amadeus than it is with the oldest international deals.

Table 2: List of analyzed acquisitions by year

Year	Number of acquisitions	%
2014	22	27%
2013	22	27%
2012	17	21%
2011	7	9%
2010	2	2%
2009	2	2%
2008	8	10%
2007	2	2%
	82	100%

Source: Own elaboration

Furthermore, in table 3, we can conclude that in most the economic deals that we gather – 72% - China acquired more than 50% of the target company leaving that company under Chinese control.

Table 3: List of analyzed acquisitions by percentage acquired

Acquisition	Number of acquisitions	%
Majority	59	72%
Not Majority	23	28%
	82	100%

Source: Own elaboration

Moreover, our 82 companies' selection covers most of the Standard Industrial Classification index³. Therefore, from the original 10 group codes, which were established by the United States Government in order to uniformly identify and group companies by their primary business objective, we group them into 7 groups as is shown in Table 4.

³ “Standard Industrial Classification (SIC) codes are four-digit numerical codes assigned by the U.S. government to business establishments to identify the primary business of the establishment. The classification was developed to facilitate the collection, presentation and analysis of data; and to promote uniformity and comparability in the presentation of statistical data collected by various agencies of the federal government, state agencies and private organizations. The classification covers all economic activities.” <https://siccocode.com/en/pages/what-is-a-sic-code>. Accessed on 20th February 2018.

Table 4: List of analyzed acquisitions by SIC Code

SIC Code	Definition	Number of acquisitions	%
[0001;2000[	Agriculture and Mining	7	8%
[2000;4000[	Manufacturing	43	52%
[4000;5000[	Transportation & Public Utilities	15	18%
[5000;6000[	Trade	8	9%
[6000;7000[	Finance, Insurance, Real Estate	1	1%
[7000;9000]	Services	10	12%
>9000	Public Administration	0	0%

Source: Own elaboration

This table above clearly illustrates that Chinese players do acquire more companies from Manufacturing sector than from the others (52% of our sample is characterizes by European companies of this sector). In addition, there is a big importance of the Transportation and Public Utilities sector with almost 18% of our companies' sample. These comes along with the point 2.5.1.3. of this dissertation where we display the possibility of the lack of resources and infrastructures as being one explanation of China's growing place in internationalization.

3.2.1. Control Group

However, besides those 82 companies affected by a cross-border deal, we matched each and every single one of those with a peer company from the same European country and with a similar structure (total Assets in the t-1 year between 70 to 130% of the original company), similar financial data (EBIT between 70 to 130% of the original company) and operational status (same three first digits of the acquired company SIC code) but without any intervention of other Chinese company whatsoever on their capital. Nevertheless, in the selection of the proxy company, whenever did not exist a group of 5 possible proxies to the acquired company, the criteria were extended, and the proximity was increased to 50 to 150% in comparison to the acquired one. In addition, if even after this increase, there was not a group of 5 different possibilities to be chosen one, the criteria "Same Country" was taken

away. All of these filters were added to guarantee that there was a considerable group of similar companies and the chosen one was, in fact, the most similar to the acquirer one.

Having this in mind, we end up with a selection of 164 companies from 16 different European countries – 82 acquired by a Chinese company and 82 control companies that were not acquired by a Chinese company.

In this way, we will truly distinguish the effect of a M&A by company and by sector through the years from the situation in which neither an acquisition nor a merge happened with one where it actually did, and only then we will be able to measure the impact of such international move.

3.3. Descriptive Analysis

Table 5 displays the differences between the acquired companies we selected and their matching companies – the control group – for the main structural and operational variables – Assets, EBIT, Operating Profit and ROA. The data gathered is related from the year immediately before the acquisition took place (t-1).

Table 5: Descriptive statistics and comparison between the two groups of companies

This table reports the summary statistics for the total sample of 84 firms for the acquired group plus 84 firms for the control group. The sample period begins in 2007 and ends in 2014. The variables Assets, EBIT, Sales, ROA (which is computed by the ratio between EBIT and Assets) are referred to the year before the acquisition. Panel C presents the difference between the acquired company and its matching non-acquired one. All values presented are in thousands of US dollars. The classification ***, **, * denotes for 1%, 5% and 10% significance level, respectively, for the Wilcoxon Signed Rank Test (medians) and the T-student test (means). ROA values are shown in percentage (%). Assets, EBIT and Sales values are in thousands of euros. “Obs” column represents the number of companies from our sample with data available.

Variables	Descriptive statistics					
	Obs	Mean	Std. Dev.	Min	Max	Median
Panel A: Acquired Companies						
Assets	82	4 906.73	19 401.89	0.05	155 125.23	38.65
EBIT	79	490.39	2 568.33	-458.35	22 093.09	1.24
Sales	72	5 206.58	31 323.17	0.01	265 108.81	98.67
ROA	80	-3.01%	34.81%	-173.53%	75.74%	3.90%
Panel B: Matching Companies						
Assets	82	6 042.17	23 284.08	0.04	180 220.51	42.57
EBIT	82	797.52	4 024.36	-486.77	33 451.29	1.32
Sales	72	3 325.23	9 413.85	0.03	52 291.27	46.15
ROA	82	-0.16%	27.42%	-147.64%	75.91%	4.58%
Panel C: Adjusted Variables						
Assets	-	-1 135.45	-	-	-	0.37
EBIT	-	-337.38	-	-	-	-0.46
Sales	-	-1 891.44	-	-	-	0.65
ROA	-	-2.23%	-	-	-	-0.15%

Source: Own elaboration

By the direct observation of the values of the table, some conclusions may be drawn. First, our sample gathers a vast range of companies with different sizes. That can be seen by the massive distance between the minimum value and the maximum value and the discrepancy between the mean and the median results.

Then, as it was defined in our criteria in the previous section, our sample was constructed with the intent of having matching companies that were the most similar that could be possible to our original acquired companies. Although the observation of the mean values may mislead to a different conclusion (since the mean is an average value affected by the existence of outliers), if we take the median for each of the variables analyzed, we can deduct that similarity may have been reached as the values are not statistically different between both

panels A and B as the t-test and the Wilcoxon Ranksign test proved that the mean and median differences were not statistically different from 0.

Even though the t-test's results were not that clarifying about the similarity between variables, and since there is a big discrepancy between our variables, our analysis will tend to rely more on the medians. Therefore, according to the p-values for each of the variables' medians got from the Wilcoxon Signrank test, we can conclude that the medians for all the variables are statistically different from 0 for a significance level of 1%, 5% and 10%. In addition, when we conducted the same test to prove the similarity between the same variable in panel C, we reached the conclusion intended: for the values from the year before being acquired, the company and its matching company were statistically similar in terms of Assets, EBIT and ROA.

4. Results – Univariate Analysis

Table 6 reports the raw and adjusted growth of assets and sales and the raw and adjusted change on ROA after the acquisition, when compared with the year before the acquisition. In order to exclude the impact of outliers in the means the values in our sample were winsorized at 5% (95%).

Table 6: Companies' Performance change and Structure growth analysis

This table reports the summary statistics for the total sample of 84 firms for the acquired group plus 84 firms for the control group. The sample period begins in 2007 and ends in 2014. The variables Assets, Sales, ROA (which is computed by the ratio between EBIT and Assets) are referred to the year before the acquisition. The acquired group column is presented as "Raw Variable". The "Adjusted Variable" column presents the difference between the acquired company and its matching non-acquired one. The variables Assets and Sales are measured as percentages (%), since they are representing the growth against the year before being acquired. In the same line of thought, since ROA, ROS - Return on Sales - (EBIT/Sales) and Asset Turnover (Sales/Assets) are representing ratios, the comparison against the year t-1 is analyzed in per cent points (p.p.).

Number of observations are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level, respectively, for the Wilcoxon Signed Rank Test (medians) and the T-student test (means).

		Raw Variable			Adjusted Variable		
		-1 to +1	-1 to +2	-1 to +3	-1 to +1	-1 to +2	-1 to +3
Assets (%)	Mean	26.70*** (82)	45.64*** (80)	82.80*** (57)	18.51*** (82)	30.16*** (80)	44.14*** (52)
	Median	8.58*** (82)	14.45*** (80)	20.17*** (57)	-0.63 (82)	3.00* (80)	20.47** (52)
Sales (%)	Mean	10.23** (67)	64.27** (68)	98.08 ** (48)	5.42 (63)	58.39** (62)	80.19* (37)
	Median	3.43 (67)	7.56* (68)	14.12** (48)	4.93 (63)	12.36 (62)	-5.19 (37)
Δ ROA (p.p.)	Mean	-2.05 (82)	-0.10 (80)	3.85 (57)	-3.28 (82)	-2.03 (80)	2.09 (52)
	Median	-1.54 (82)	-0.19 (80)	0.02 (57)	-0.06 (82)	0.85 (80)	1.21 (52)
Δ ROS (p.p.)	Mean	-8.44*** (66)	-0.18 (68)	0.17 (45)	-5.32 (62)	-4.38 (62)	0.99 (36)
	Median	-0.99* (66)	-0.07 (68)	-0.39 (45)	-1.61 (62)	0.17 (62)	-0.13 (36)
$\Delta \frac{\text{Sales}}{\text{Asset}}$ (p.p.)	Mean	8.34 (67)	4.65 (67)	-0.75 (44)	16.45* (63)	19.87* (62)	-2.16 (36)
	Median	-2.27 (67)	-1.89 (67)	-3.68 (44)	1.88 (63)	1.35 (62)	8.21 (36)

Source: Own elaboration

Therefore, in Table 6, we can directly see that the acquired companies' assets grew significantly through the years even when adjusted with the growth occurred on non-acquired companies. However, when we look to the adjusted growth rate, this growth is significantly more positive year by year, demonstrating that was in fact a bigger structural growth of acquired companies' assets when compared to the non-acquired ones for the three years after the acquisition took place. In addition, when we apply the t-test to the change of growth rate of Assets, the results show us that all of the Adjusted Asset Growth rates are statistically different from 0, with a significance level of 1%. Moreover, when we conducted the Wilcoxon sign-rank (Mann-Whitney) test, we came along with the same conclusion, the adjusted median of the growth change is statistically different from 0 at a significance level of 5% for the year 3.

Likewise, when we analyze the growth of sales for the same period of time, we find similar conclusions as we did with the assets. The sales' growth for acquired companies are always positive for both mean and median results reaching a mean increase of almost 98.08% upon the 3rd year when compared to the year prior the acquisition. However, when we look to the adjusted sales variable, we observe that the median results are no statistically significant and inclusive there is a reduction of the sales growth when compared to the control group. On the other hand, our mean values continue to be statistically relevant for the second and third year of Sales growth when compared to year before acquisition. Therefore, according to t-test applied to the sales growth, for the second year and third after being acquired, the acquired companies see their sales grow more than their proxy and non-acquired companies, which is not in concordance with the results from the Adjusted Sales growth.

However, regarding ROA change, the situation is quite different from the previous variables. In this case, when we apply the significance tests, they fail to prove the statistical relevance of ROA's variances for both Raw and Adjusted variables for the analyzed period. Therefore, we cannot analyze the evolution since they are not statistically relevant. This may be explained by the fact that acquired companies do see their assets grow but in the same proportion as they see their incomes, which in the end result in the same ratio of profitability. This is sustained by the statistically insignificant results from both Asset Turnover ratio and Operating Income Margin.

Nevertheless, with this table and all the comments and tests previous done in this section, we can also conclude that, the Chinese participation in European companies' capital, does not have a negative effect in their financial performance. At the end they may see their company remain with the same rentability but with a much larger structure of sales and assets.

5. Multivariable Analysis

Once our first hypothesis is tested and proved – and we will know that being acquired enabled those companies to thrive more than they actually would if they have remained non-acquired –, or, on the other hand, rejected, we will study how important are differences in culture between both parties of the international deal on their financial and structural performance.

Therefore, we will use, as for the second part of this study methodology, a Multiple Linear Regression to verify our second Hypothesis:

Hypothesis 2.1: Culture differences has influence on the financial and structural performance of the acquired companies.

Hypothesis 2.2: A specific trait of cultural differences influences the financial and structural performance of the acquired companies.

In this section our multivariable model will still include the two groups for two time periods in which one of the considered groups is subjected to a change between those time periods and the other group is not. If we consider the “change” as “being acquired”, the “two time periods” as the “years before being acquired and the years after” and “the two groups” as the “companies acquired and its matching companies”, we realize this model was the most effective way to measure these variables importance. In addition, by doing aforesaid type of comparison, this econometric model eliminates the changes in the economic environment since such changes could affect all the companies, acquired or not, in the same way justifying every increase in performance, when we do not want such attribution.

Hence, our multivariable model can be defined as the following two expressions:

$$X_i = \alpha + \beta_1 * D_A + \beta_2 * C_{diff} + \beta_3 * D_A * C_{diff} + \varepsilon \quad (6)$$

$$\begin{aligned} X_i = & \alpha + \beta_1 * D_A + \beta_2 * C_1 + \beta_3 * C_2 + \beta_4 * C_3 + \beta_5 * C_4 + \beta_6 * \\ & C_5 + \beta_7 * C_6 + \beta_8 * D_A * C_1 + \beta_9 * D_A * C_2 + \beta_{10} * D_A * C_3 + \\ & \beta_{11} * D_A * C_4 + \beta_{12} * D_A * C_5 + \beta_{13} * D_A * C_6 + \varepsilon \quad (7) \end{aligned}$$

Where:

X_i : is one of the following variables analyzed: ROA Change, Asset's growth, Sales growth, for the acquired company for the first three years after ($i = t+1, t+2, t+3$)

$\alpha ; \beta$: are the parameters of the relationship between our Dependent Variable and Independent ones

D_A : is a dummy variable taking the value 1 when a company was acquired by a Chinese group and 0 when it was not. This variable controls for differences in constant performance between acquired companies and the control group – non-acquired companies.

C_{diff} : is continuous variable which measures the aggregated Hofstede cultural difference between the country from which a company was acquired (or from which a similar non-acquired company is) and China. The larger is this indicator, the larger the cultural difference is.

$D_A * C_{diff}$: is an interaction term between our two defining variables. Its coefficient represents the combined effect of a company being acquired and its cultural aggregated difference against China.

C_i : are cultural independent variables in which $i=1,2, 3, 4, 5, 6$ represent in the same order the 5 Cultural Distance indicators measured by Hosftede: Individualism, Masculinity, Power Distance, Uncertainty avoidance, Long-Term Orientation, Indulgence versus restraint. Again, the bigger the indicators are, the bigger is the difference against China.

$D_A * C_i$: is an individual interaction term to each one of the cultural indicators (i) to specify which cultural difference has more influence in the measure of our dependent variable.

ϵ : is the error term.

5.1. Independent Variables

In terms of our financial independent variables, we will use databases such as Zephyr and Amadeus.

In addition, when collecting all the information we need for Cultural Variables we will adopt formulas used by many past studies from multiple authors.

Cultural Distance will be defined as Wieke Otterspeer (2016) did using Hofstede Formula:

$$\mathbf{Cultural\ Distance} = \frac{1}{6} \sqrt{\sum_{i=1}^6 (S_{A,i} - S_{T,i})^2} \quad (8)$$

Where:

$S_{A,i}$: represents the acquirer score on cultural dimension i: Individualism, Masculinity, Power Distance, Uncertainty avoidance, Long-Term Orientation, Indulgence versus restraint;

$S_{T,i}$: represents the target score on cultural dimension i (the same dimensions defined before)

6. Estimation Results

The results of the estimations are presented on Table 7 and they are clear about the importance of the time change when we want to analyse the influence of cultural distance: for both ROA Growth and Sales Growth, the years t+1 and t+2 are not statistically significant when we analyse the influence of Cultural difference against China.

Table 7: The effect of aggregated Cultural Difference against China in the analyzed variables

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and its aggregated cultural difference against China (represented by the continuous (C_{diff} variable) which agglomerates the difference measured in 6 different indicators: Power Distance, Individualism, Masculinity, Uncertainty Avoidance, Long-Term Orientation, Indulgence versus Restraint) expressed by the interaction $D_A * C_{diff}$.

In addition, the models (1) to (9) are divided by our 3 main dependent variables in groups of 3. Each group represents the yearly growth rate from the year prior the acquisition took place, respectively t+1, t+2, t+3 per Dependent Variable.

The more reduced number of observations in models (3), (6) and (9) are also justified by this temporal criteria of the models since for more recent years (t+3) the data is not always available.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	a) ASSETS GROWTH			b) SALES GROWTH			c) ROA CHANGE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
D_A	-4.847* (2.838)	-5.371* (3.296)	-17.637 (11.993)	-0.405 (2.053)	0.881 (2.320)	4.941** (2.310)	0.373 (0.434)	-0.355 (0.430)	-0.590 (0.385)
C_{diff}	0.014 (0.124)	0.035 (0.143)	0.035 (0.501)	0.030 (0.089)	0.028 (0.102)	0.042 (0.097)	0.006 (0.019)	0.003 (0.019)	-0.005 (0.017)
$D_A * C_{diff}$	0.353** (0.181)	0.396* (0.210)	1.304 * (0.763)	0.042 (0.133)	-0.033 (0.150)	-0.300** (0.149)	-0.024 (0.028)	0.020 (0.027)	0.042* (0.025)
Constant	-0.156 (1.941)	-0.388 (2.245)	-0.288 (7.872)	-0.354 (1.382)	-0.318 (1.588)	-0.574 (1.536)	-0.071 (0.297)	0.097 (0.293)	0.069 (0.261)
N° Observations	164	162	118	164	162	118	164	162	114
R-Squared	0.063	0.066	0.069	0.063	0.066	0.069	0.006	0.008	0.051

Source: Own elaboration

However, when we look to the year t+3, for the same dependent variables ROA and Sales Growth, we now find a significant influence of the interaction Variable $D_A * C_{diff}$ proving that the cultural difference against China starts to be influential in acquired companies only after a period of 3 years has passed since the acquisition. This can be explained with the fact that during the acquisition, both companies, the acquirer and the acquired, want to make the international transaction as smooth as possible leaving the emergence of the cultural

differences, affecting the way business are conducted, for a further period in time. On the other hand, it is also a viable explanation the fact that cultural differences may take time to be incorporated on both sides of acquisition deal, postponing the effects of those same differences.

On the other hand, if we analyse the column of the Assets Growth, we conclude that this variable is, by far, the most clearly affected one by the acquisition by a Chinese company. This is consistent with the univariate analysis done in section 4 of this dissertation where we saw the superior growth in the asset structure of an acquired company when compared to its proxy non-acquired.

Nevertheless, and since the multivariable analysis consists in a much more efficient tool to picture the reality of a company, we can indeed conclude that the differences in culture have, in fact, a consequence in ROA, Assets and Sales growth. This is consistent with the findings of Bjorkamn et al. (2007)

Moreover, since we have already proved the impact that cultural difference, in an aggregated way, has in ROA change, Sales and Assets growth, we need now to specify which indicator of culture has a deeper influence in our financial performance indicators.

Therefore, in tables 8, 9 and 10 we broke down the cultural difference variable “ C_{diff} ”, previously used, into the 6 cultural indicators that were being combined: Individualism, Masculinity, Power Distance, Uncertainty avoidance, Long-Term Orientation, Indulgence versus restraint. However, instead of analysing the 3 years post the acquisition, we focus our analysis on the 2nd year after being acquired in order to be more efficient in analysing the effects of culture in an acquisition. This decision was also supported with the fact that in the first year, the results are not that clear, since it is too close to the international acquisition; while in the third year, because of having less observations, could make the significance of our study diminish, therefore, the study of the second year was the best option to draw conclusions from.

As we can see from the observation of the table 8, when we focus on the Assets Growth, it is the difference in the Cultural indicator of Masculinity, defined by Hofstede, that most statistically influences acquired companies to witness their assets grow more than they would if they have remained non-acquired by Chinese players. This indicator measures what drives a society - if it points a bigger score to a country, that would mean that there is an inherent motivation to compete, to achieve the best results possible in order to always pursue, from the very beginning in school until the throughout of organisational life, success above all

things. This is a more “Masculine” society and it is how Hofstede Index, with an attribution of 66 points (against a mean of 40 for the analysed European countries), defines China. On the other hand, a low score in the Masculinity indicator would mean that the society is more “Feminine” which would imply that the dominant values deep-rooted are not success and superiority but the quality of life itself without having to stand out from the group. Therefore, against the general perception that we may have, what this study tells us is that, *ceteris paribus*, if China, a “Masculine” defined society, acquires companies from European countries characterized as being more “Feminine” (such as from the north of Europe –Denmark, Netherlands, Norway, Sweden - who have the lowest score in this indicator), the possibility to see the acquired company structurally thrive in the post-acquisition years, is statistically more significant, because of cultural Masculinity difference, when compared to the same companies, from the same Nordic countries but without any international acquisition. This result come in the same line with Chakrabarti et al. (2009) which concluded from their study the positive role differences in culture have in the financial and structural performance of acquired companies.

Table 8: The effect of Cultural Differences in the Assets growth

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Assets Growth for the second year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.072 (0.825)	-0.349 (1.520)	0.160 (0.405)	0.318 (0.552)	0.129 (0.662)	-0.022 (0.645)
D_{PDI}	0.006 (0.020)					
$D_A * D_{PDI}$	0.028 (0.029)					
D_{IDV}		0.010 (0.028)				
$D_A * D_{IDV}$		-0.012 (0.036)				
D_{MAS}			-0.000 (0.014)			
$D_A * D_{MAS}$			0.051** (0.021)			
D_{UAI}				-0.005 (0.015)		
$D_A * D_{UAI}$				-0.028 (0.021)		
D_{LTO}					0.001 (0.021)	
$D_A * D_{LTO}$					0.026 (0.031)	
D_{IND}						0.001 (0.021)
$D_A * D_{IND}$						0.026 (0.031)
R-squared	0.038	0.020	0.085	0.052	0.029	0.059

Source: Own elaboration

Furthermore, when we look to table 9 Sales growth models, we observe something different. The first two years after the acquisition takes place, there is not any difference in any cultural indicator that is statistically relevant in influencing the way Sales growth change, as the annexe 3 assists to conclude. This comes along with the conclusions we drew in the previously analysis where we said that only after 3 years have passed, cultural differences actually influence Sales growth. In addition, with annexe 4 we confirm that the cultural distance only influences Sales on the 3 year after the acquisition and in this case, it is the Long-Term Orientation difference. This indicator measures the links a society has to its past and its importance in defining the present and the future. A high score in this indicator (such as China has – 87 face a mean of 55 from our analysed European countries) means the culture is very pragmatic and people show an ability to change and adjust their traditions if that will result in a better future with a bigger possibility to achieve better results. Differently, if a country has a lower score in this indicator (such as Finland, Norway, Portugal, Poland), that would suggest the culture is rather normative and the people exhibit greater respect for stablished traditions without great prepare for the future. In the end what this table implies is whenever China acquires a company from a country with whom it has a bigger difference in Long Term Orientation, that same difference will actually result in a statistically significant possibility of decrease the level of Sales when compared to a similar company that was not acquired by China. Moreover, this conclusion comes in concordance to what a survey conducted by by Basford et al, in 2010 concluded about the risks and the possibility of a lack of success in the financials of a company when the acquired and the acquirer companies come from far cultural different countries.

Table 9: The effect of Cultural Differences in the Sales growth

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Sales Growth for the second year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.042 (0.496)	-0.349 (0.914)	0.155 (0.258)	0.253 (0.351)	0.143 (0.456)	-0.072 (0.407)
D_{PDI}	0.004 (0.013)					
$D_A * D_{PDI}$	0.012 (0.018)					
D_{IDV}		0.009 (0.017)				
$D_A * D_{IDV}$		0.011 (0.022)				
D_{MAS}			-0.002 (0.010)			
$D_A * D_{MAS}$			-0.016 (0.014)			
D_{UAI}				-0.004 (0.009)		
$D_A * D_{UAI}$				-0.011 (0.013)		
D_{LTO}					-0.001 (0.015)	
$D_A * D_{LTO}$					-0.008 (0.021)	
D_{IND}						0.006 (0.012)
$D_A * D_{IND}$						0.005 (0.018)
R-squared	0.026	0.030	0.034	0.034	0.016	0.021

Source: Own elaboration

For the last variable, our performance variable ROA, the results represent a different situation from the previous ones. In the first year after the acquisition, no significance was found in the difference in culture that would influence the ROA change. However, when we pass to the second year after the acquisition, as we can see in Table 10, then we have 2 cultural indicators that are statistically relevant: Uncertainty Avoidance and Individualism. The first of these two cultural indicators is related to what extent a society accepts the uncertainty of the future or, in the other case, tries to avoid it by the usage of strict rules and laws and deeper roots of intolerance towards unorthodox behaviour and ideas. In this case, it is China who has the lowest score – demonstrating that Chinese people are indeed more pragmatic in life with a bigger acceptance of the ambiguity of the future (they score here 30 points when the mean of Europe is 67 verifying the inner urge of European countries to control the uncertainty). Thus, whenever China acquires a company from a country where the Uncertainty Avoidance level is more different of, our model tells us that, statistically, after two years of being acquired, the ROA of the acquired company will decrease. This conclusion is consistent with Liu (2017) who stated that Uncertainty Avoidance disparity between China and the acquired companies' country would result in weakening the company after being acquired.

In terms of Individualism, this indicator measures the degree of interdependence a society cultivates among its population. Therefore, when we have a country as China with a score of 20 we can support the fact that Chinese population act deeply in the interests of the group rather of their own, which means that Chinese society is rather a Collectivist one (when we compare to the mean of Europe, the score is 63, demonstrating that European countries are much more Individualists than China). Thus, and with the observation of table 11, we can conclude that when a company, from a country with an Individualism level far different from China, is acquired by a Chinese player, in the second year after the acquisition takes place, with a statistically significance of 10%, it will see their ROA grow. This ending contrast the conclusions of Ahern (2015) where he stated that the distance in Individualism would result in higher costly frictions between the two firms and would reduce the acquired company results.

Table 10: The effect of Cultural Differences in the ROA Change

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the ROA Change for the second year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.217 (0.105)	0.426** (0.192)	0.059 (0.054)	-0.069 (0.071)	-0.081 (0.084)	0.191** (0.083)
D_{PDI}	-0.004* (0.003)					
$D_A * D_{PDI}$	0.005 (0.004)					
D_{IDV}		-0.007** (0.004)				
$D_A * D_{IDV}$		0.008* (0.005)				
D_{MAS}			-0.000 (0.002)			
$D_A * D_{MAS}$			0.001 (0.003)			
D_{UAI}				0.004** (0.002)		
$D_A * D_{UAI}$				-0.005** (0.003)		
D_{LTO}					0.005* (0.003)	
$D_A * D_{LTO}$					-0.005 (0.004)	
D_{IND}						-0.005 (0.003)
$D_A * D_{IND}$						0.006* (0.004)
R-squared	0.022	0.029	0.004	0.032	0.024	0.027

Source: Own elaboration

In addition, even though the other variables seem not to be statistically relevant for any confidence level of 1%, 5% or 10%, we cannot prove that those indicators do not have any impact on the performance and structure variables.

7. Conclusion

Giving the significant advance of China internationalization over the world's major companies (CNBC, 2017), our dissertation objective was understanding whether or not being acquired by Chinese company, would make the acquired company stand out among the others by growing more their assets and their profitability, or, on the other hand, would make the acquired company collapse.

For that we limited our investigation to companies acquired in Europe, between 2007 and 2014, since it is the continent which, according to Bloomberg (2018), in the last decade, saw 45% more china-related activity than the US for the exact same period.

To do so, we have selected 82 different companies that were acquired in the defined time-frame, from 16 European countries, representing all the SIC codes groups.

In addition, with the objective increasing the accuracy of our conclusions, for these 82 acquired companies, we selected an extra 82 non-acquired companies but similar in everything else to the acquired ones.

From the univariate analysis we were able to uncover several main conclusions.

First, the level of the Assets and Sales grew in a positive way for both acquired and non-acquired companies. However, when we looked to the adjusted growth rate, we realize that were acquired companies that saw their assets grow more. In addition, the level of significance obtained may suggest that being acquired by Chinese companies, boosts the growth of assets for the years of the post-acquisition.

Second, regarding ROA, for the first year after being acquired, we noticed a reduction of ROA from companies that were acquired when compared to the control group. This may suggest that, as Richard Harroch wrote for Forbes in 2015, how difficult is to create synergies and harmony between the acquirer and the acquired. For the second and third year after the acquisition, the development is positive which may support the idea that acquired companies overcome the destabilization of being acquired with time. However, these results were not statistically significant possibly because of the lack of observations in the $t+3$.

In our multivariable analysis, we drew also certain important conclusions:

First the results are clear about the existence of an impact of the difference in culture between the acquired company's country and China. In terms of Assets Growth, as in the univariate analysis, this is the variable in which the cultural differences do influences most, from the

very first year after being acquired. However, for the case of Sales and ROA, that impact is only statistically significant upon the 3rd year after acquisition.

Second, we conclude that in terms of Assets, it is the difference in the Masculinity level that influences the most the acquired companies to structurally grow – as Chakrabarti et al. (2009) concluded. As for the growth level of Sales, it is the Long-Term Orientation difference that most influences the Sales of the acquired company to reduce – which is in the line with by Basford et al, in 2010. In terms of ROA change indicator, it is the Uncertainty Avoidance and Individualism indicators that most influence ROA of acquired companies. This ending contrast the conclusions of Ahern (2015).

Despite the conclusions that were possible to draw from this dissertation, some limitations have to be enlightened.

Firstly, since an acquisition is an extensive event, we would need a bigger interval of time to better evaluate the consequences of such complex event that is an acquisition.

Secondly, with a bigger time-frame of acquisitions and data it would be very favorable for the study the usage of 1) more cultural indicators and 2) financial indicators.

In the end, if these limitations are taken care of, it can result in a study where we can, as most confident we can be, predict what would happen to a specific company that was acquired, just by knowing in which country is that company from and what financial data had before the acquisition. This would facilitate and improve the international acquisitions all over the world.

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Annexes

Annex 1. The effect of Cultural Differences in the Assets growth for the first year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Assets Growth for the first year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.036 (0.714)	-0.111 (1.313)	0.063 (0.349)	0.069 (0.478)	0.032 (0.572)	0.022 (0.559)
D_{PDI}	-0.346 (0.992)					
$D_A * D_{PDI}$	0.027 (0.025)					
D_{IDV}		0.003 (0.024)				
$D_A * D_{IDV}$		-0.010 (0.031)				
D_{MAS}			-0.000 (0.018)			
$D_A * D_{MAS}$			0.045*** (0.018)			
D_{UAI}				-0.000 (0.013)		
$D_A * D_{UAI}$				-0.026 (0.018)		
D_{LTO}					0.001 (0.018)	
$D_A * D_{LTO}$					0.025 (0.026)	
D_{IND}						0.001 (0.017)
$D_A * D_{IND}$						0.038* (0.024)
R-squared	0.033	0.018	0.086	0.045	0.029	0.051

Source: Own elaboration

Annex 2. The effect of Cultural Differences in the Assets growth for the third year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Assets Growth for the third year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.081 (2.980)	0.050 (5.079)	0.216 (1.420)	0.404 (1.874)	0.240 (2.248)	0.146 (2.467)
D_{PDI}	0.009 (0.073)					
$D_A * D_{PDI}$	0.121 (0.106)					
D_{IDV}		0.004 (0.924)				
$D_A * D_{IDV}$		-0.033 (0.118)				
D_{MAS}			0.003 (0.050)			
$D_A * D_{MAS}$			0.173*** (0.073)			
D_{UAI}				-0.005 (0.052)		
$D_A * D_{UAI}$				-0.080 (0.072)		
D_{LTO}					0.001 (0.073)	
$D_A * D_{LTO}$					0.111 (0.104)	
D_{IND}						0.004 (0.073)
$D_A * D_{IND}$						0.135 (0.103)
R-squared	0.033	0.018	0.110	0.048	0.044	0.054

Source: Own elaboration

Annex 3. The effect of Cultural Differences in the Sales growth for the first year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Sales Growth for the second year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.100 (0.441)	-0.449 (0.780)	0.234 (0.229)	0.285 (0.308)	0.099 (0.395)	-0.142 (0.353)
D_{PDI}	0.006 (0.011)					
$D_A * D_{PDI}$	0.011 (0.016)					
D_{IDV}		0.011 (0.015)				
$D_A * D_{IDV}$		0.012 (0.019)				
D_{MAS}			-0.007 (0.008)			
$D_A * D_{MAS}$			-0.009 (0.013)			
D_{UAI}				-0.005 (0.008)		
$D_A * D_{UAI}$				-0.015 (0.012)		
D_{LTO}					0.000 (0.013)	
$D_A * D_{LTO}$					-0.000 (0.018)	
D_{IND}						0.009 (0.011)
$D_A * D_{IND}$						0.010 (0.016)
R-squared	0.023	0.035	0.028	0.050	0.006	0.032

Source: Own elaboration

Annex 4. The effect of Cultural Differences in the Sales growth for the third year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the Sales Growth for the second year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.064 (0.519)	-0.200 (0.859)	0.107 (0.257)	0.209 (0.322)	-0.030 (0.449)	-0.177 (0.447)
D_{PDI}	0.004 (0.013)					
$D_A * D_{PDI}$	0.009 (0.019)					
D_{IDV}		0.005 (0.015)				
$D_A * D_{IDV}$		-0.006 (0.020)				
D_{MAS}			-0.001 (0.009)			
$D_A * D_{MAS}$			-0.010 (0.014)			
D_{UAI}				-0.004 (0.009)		
$D_A * D_{UAI}$				0.004 (0.013)		
D_{LTO}					0.004 (0.014)	
$D_A * D_{LTO}$					-0.034** (0.019)	
D_{IND}						0.008 (0.013)
$D_A * D_{IND}$						-0.023 (0.019)
R-squared	0.025	0.017	0.027	0.018	0.082	0.038

Source: Own elaboration

Annex 5. The effect of Cultural Differences in the ROA change for the first year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the ROA Change for the first year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.044 (0.108)	0.350* (0.195)	-0.009 (0.054)	-0.039 (0.322)	-0.090 (0.085)	0.047 (0.020)
D_{PDI}	-0.001 (0.003)					
$D_A * D_{PDI}$	-0.000 (0.004)					
D_{IDV}		-0.006 (0.004)				
$D_A * D_{IDV}$		0.005 (0.005)				
D_{MAS}			0.002 (0.002)			
$D_A * D_{MAS}$			-0.002 (0.003)			
D_{UAI}				0.002 (0.002)		
$D_A * D_{UAI}$				-0.000 (0.003)		
D_{LTO}					0.004 (0.003)	
$D_A * D_{LTO}$					-0.006* (0.004)	
D_{IND}						-0.001 (0.003)
$D_A * D_{IND}$						-0.004 (0.004)
R-squared	0.001	0.020	0.005	0.011	0.018	0.020

Source: Own elaboration

Annex 6. The effect of Cultural Differences in the ROA change for the third year

This table displays the combined impact of a company being acquired (represented by the dummy D_A) and the effect of each cultural difference indicator against China, measured in 6 different indicators: Power Distance (D_{PDI}), Individualism (D_{IDV}), Masculinity (D_{MAS}), Uncertainty Avoidance (D_{UAI}), Long-Term Orientation (D_{LTO}) and Indulgence Versus Restraint (D_{IND}), on the ROA Change for the third year after being acquired.

In addition, the models (1) to (6), respectively from the order of indicators previously presented, represent the regression done to each cultural indicator individually.

Standard errors are reported under the coefficient in parenthesis. The classification ***, **, * denotes for 1%, 5% and 10% significance level.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.009 (0.097)	0.012 (0.163)	-0.013 (0.047)	-0.014 (0.061)	0.013 (0.073)	-0.015 (0.081)
D_{PDI}	-0.001 (0.002)					
$D_A * D_{PDI}$	0.005 (0.003)					
D_{IDV}		-0.001 (0.003)				
$D_A * D_{IDV}$		-0.001 (0.004)				
D_{MAS}			-0.000 (0.002)			
$D_A * D_{MAS}$			0.003 (0.002)			
D_{UAI}				-0.000 (0.002)		
$D_A * D_{UAI}$				-0.001 (0.002)		
D_{LTO}					-0.001 (0.002)	
$D_A * D_{LTO}$					0.005 (0.003)	
D_{IND}						0.000 (0.002)
$D_A * D_{IND}$						0.002 (0.003)
R-squared	0.045	0.017	0.035	0.023	0.040	0.020

Source: Own elaboration